

IN THE CLAIMS

Please amend claim 40 as indicated below.

The listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

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Claim 1 (original) A method for predicting a result of a conditional branch instruction, comprising the steps of:

determining if a specified condition register field is used to store a branch condition of the conditional branch instruction; and

providing a software branch prediction of the conditional branch instruction as a function of the determination if the specified condition register field is used to store the branch condition of the conditional branch instruction.

Claim 2 (original) The method as recited in claim 1, wherein the software branch prediction predicts that the conditional branch instruction will be taken if the specified condition register field is used to store the branch condition of the conditional branch instruction.

Claim 3 (original) The method as recited in claim 2, wherein the software branch prediction predicts that the conditional branch instruction will be not taken if the specified condition register field is not used to store the branch condition of the conditional branch instruction.

Claim 4 (original) The method as recited in claim 1, wherein the software branch prediction predicts that the conditional branch instruction will be not taken if the specified condition register field is used to store the branch condition of the conditional branch instruction.

Claim 5 (original) The method as recited in claim 4, wherein the software branch prediction predicts that the conditional branch instruction will be taken if the

specified condition register field is not used to store the branch condition of the conditional branch instruction.

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Claim 6 (original) The method as recited in claim 1, wherein the specified condition register field is N, where N is an integer.

Claim 7 (original) The method as recited in claim 6, wherein the specified condition register field is a multiple of N.

Claim 8 (original) A processor comprising:

- an instruction fetch unit for fetching a conditional branch instruction;
- circuitry for determining if a specified condition register field is used to store a branch condition of the conditional branch instruction; and
- circuitry for providing a software branch prediction of the conditional branch instruction as a function of the determination if the specified condition register field is used to store the branch condition of the conditional branch instruction.

Claim 9 (original) The processor as recited in claim 8, wherein the software branch prediction predicts that the conditional branch instruction will be taken if the specified condition register field is used to store the branch condition of the conditional branch instruction.

Claim 10 (original) The processor as recited in claim 9, wherein the software branch prediction predicts that the conditional branch instruction will be not taken if the specified condition register field is not used to store the branch condition of the conditional branch instruction.

Claim 11 (original) The processor as recited in claim 8, wherein the software branch prediction predicts that the conditional branch instruction will be not taken if the specified condition register field is used to store the branch condition of the conditional branch instruction.

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Claim 12 (original) The processor as recited in claim 11, wherein the software branch prediction predicts that the conditional branch instruction will be taken if the specified condition register field is not used to store the branch condition of the conditional branch instruction.

Claim 13 (original) The processor as recited in claim 8, wherein the specified condition register field is N, where N is an integer.

Claim 14 (original) The processor as recited in claim 13, wherein the specified condition register field is a multiple of N.

Claims 15-38 (withdrawn)

Claim 39 (previously presented) A data processing system for predicting whether a conditional branch instruction will be taken or not taken, the data processing system comprising the program steps of:

determining if the conditional branch instruction is positioned at a specified address in a sequence of instructions being executed; and

predicting whether the conditional branch instruction will be taken or not taken as a function of the position of the specified address.

Claim 40 (currently amended) The data processing system as recited in claim 39 [30], wherein the predicting program step will predict taken if the specified address is a multiple of specified number N.